



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,431	08/03/2001	Gene E. Kirila II	13174.7USI1	7423
23552	7590	04/18/2005	EXAMINER	
MERCHANT & GOULD PC			KIM, PAUL L	
P.O. BOX 2903			ART UNIT	
MINNEAPOLIS, MN 55402-0903			PAPER NUMBER	
			2857	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/922,431

Applicant(s)

KIRILA ET AL.

Examiner

Paul Kim

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinrichs in view of Lee and Kenney et al.

With regard to claims 1, 10, 19, and 28-33, Hinrichs teaches a system for controlling a manufacturing process comprising: a sensor for measuring an operational parameter of the manufacturing process comprising a resin and reinforcement (fig. 4, part 50), a signal generator and transmitter (fig. 4 & col. 9, lines 43-48), a process controller (col. 9, lines 48-54), a process control software associated with the process controller wherein the software adjusts the operational parameters (col. 5, lines 34-40), and a transmitter for sending instructions from the remote location to the manufacturing locations (col. 5, lines 40+).

Hinrichs, however, does not specify the transmitter having the ability to change programming of the controller on a real-time basis. Lee et al teaches a resin manufacturing process that changes program execution of a controller on a real-time basis to control the cure process (col. 10, line 65 to col. 11, line 6). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Hinrichs,

so that programming of the logic controller can be changed, as taught by Lee et al, so as to derive the added benefit of improved efficiency and improved product quality.

Hinrichs also does not specify one or more manufacturing process being controlled remotely. Kenney et al teaches a real time process control system for a manufacturing process that controls the process of a plurality of manufacturing facilities located at the same or different sites remotely (col. 2, lines 12+ and col. 36, lines 28+). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Hinrichs, so that the process is controlled remotely, as taught by Kenney et al, in order to save costs by having just one process controller controlling a plurality of facilities.

With regard to claims 2, 3, 11, 12, 20, and 21, Hinrichs teaches a pressure in the manufacturing process being measured (col. 5, lines 5-7).

With regard to claims 4, 5, 13, 14, 22, and 23, Hinrichs teaches the parameter of the process comprising a flow rate (col. 2, lines 39-46).

With regard to claims 6-8, 15-17, and 24-26, Hinrichs teaches a temperature in the manufacturing process being measured (fig. 5, lines 1-4).

With regard to claims 9, 18, and 27, Hinrichs teaches the parameter comprising a cure or cycle time (fig. 3).

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

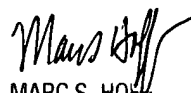
Art Unit: 2857

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 571-272-2217. The examiner can normally be reached on Monday-Thursdays 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK  
April 12, 2005

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800